ABSTRACT OF THE DISCLOSURE

A method and apparatus for a varying-radix numeration system is described. A method comprises receiving a first sequence of values, determining a number of positions for a second sequence of values, and generating the second sequence of values, each value of the second sequence corresponding to a radix, the radix for each value of the second sequence varying over the second sequence in relation to an application value, the application value corresponding to a position in the second sequence and a sum of a set of values in the second sequence.